



# A Phased Approach to Regulating Wood Smoke IN METRO VANCOUVER

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23788944

Presentation to the public



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SERVICES AND SOLUTIONS FOR A LIVABLE REGION

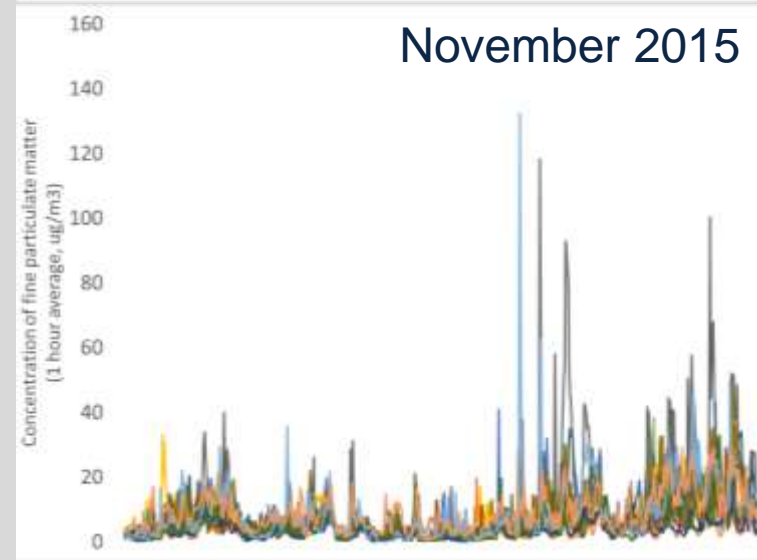
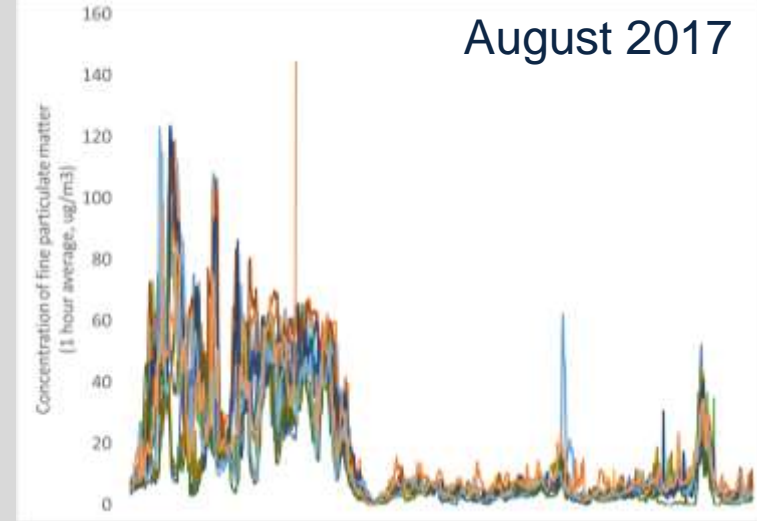


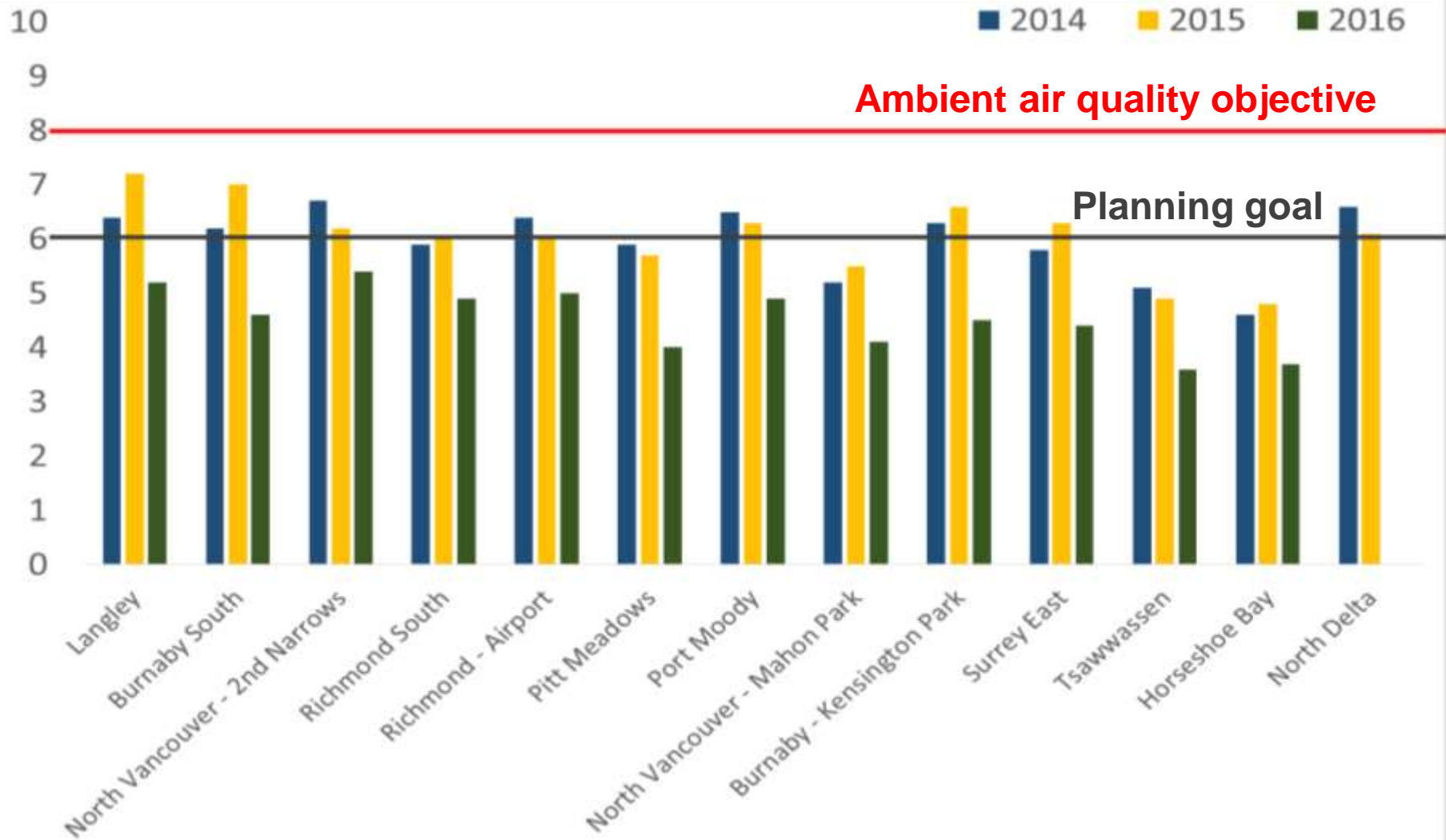
# Wood Smoke in Metro Vancouver

- Approximately 100,000 fireplaces and stoves in use in the region
- Largest source of annual fine particulate emissions in region
  - Higher proportion in winter

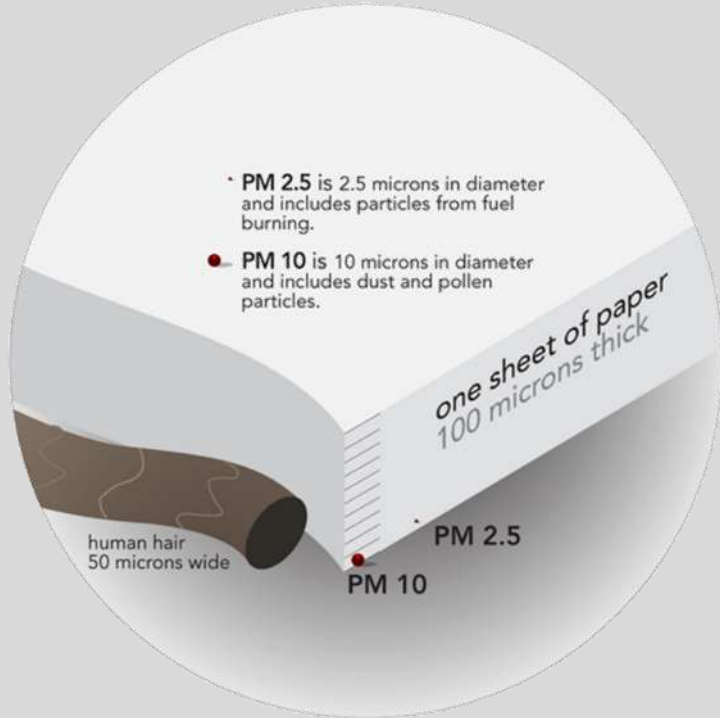
# Wood Smoke in Metro Vancouver

- 5 to 25 complaints per month to Metro Vancouver about wood smoke during the winter
- More than 60% of wood smoke complaints relate to residential wood burning





# Health Impacts



- Fine particles (PM<sub>2.5</sub>) are harmful
  - More smoke if wood is damp
- Additional health risk factors
  - Incomplete combustion
  - Wood that is not clean, contains salt water, paints, metals, adhesives
- Toxic Air Pollutants Risk Assessment
  - Ranked ninth for lifetime cancer risk
  - Second top source of toxic air pollutants, after diesel engines



# Health Outcomes

Limiting indoor wood burning to low emissions appliances could result in

- 20 to 70 fewer ER visits for heart and lung conditions
- 2,000 to 6,000 fewer asthma symptom days
- 50,000 to 150,000 fewer restricted activity days



# Current Initiatives

- Wood stove exchange program rebates
- Wood heat workshops
- Educational video on social media
- Cool weather air quality bulletins
- Wood smoke forecasting tool
- Caring for the Air reports



BURNING ADVISORY LINE

**604-436-6777**

# Current Status in Metro Vancouver

- Air Quality Management Bylaw 1082:
  - Restricts fuels allowed to be used
  - Requires operation in a manner that minimizes emissions
  - Generally prohibits causing air pollution





# Regulations elsewhere

- City of Montreal
  - Bylaw adopted in 2015
- Port Alberni, BC
  - Bylaw adopted in 2012
- Houston, BC
  - Bylaw adopted in 2011



# Preliminary Consultation Feedback

- Affordability and equity
- Target the highest impact appliances
- Include education measures
- Align with existing emissions standards and other requirements
- Phased approach



# Proposed Regulatory Elements

## 2020: Seasonal restrictions

- Prohibit emissions from indoor residential heating appliances between May 15 and September 15
- Emissions allowed from residential wood burning appliances used solely for cooking during seasonal restrictions



# Proposed Regulatory Elements

## 2022: Registration requirements

- Register appliances that emit no more than 4.5 grams particulate per hour
- Register masonry heaters

## Registration options

- At appliance point of purchase
- During installation, inspection or maintenance





# Proposed Regulatory Elements

2025: Prohibition on emissions from wood burning appliances, except

- Registered appliances
- Appliances that are the sole source of heat
- Outside the Urban Containment Boundary
- In case of hardship



# Urban Containment Boundary







WOODBURNING  
FIREPLACE

UNCERTIFIED  
WOODSTOVE

EPA  
CERTIFIED  
WOODSTOVE

GAS  
FURNACE /  
STOVE

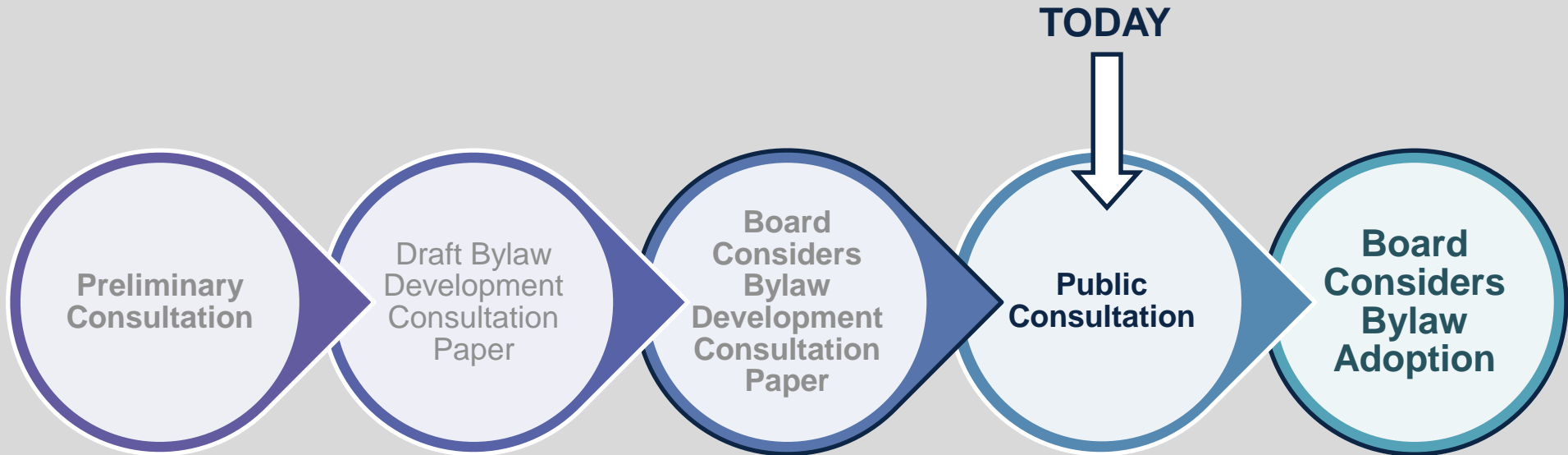
ELECTRIC  
HEAT

VERY DIRTY

VERY CLEAN

Not a ban on all appliances

# Process for Developing a Residential Wood Burning Regulation





# Feedback by January 15

- [RWB@metrovancover.org](mailto:RWB@metrovancover.org)
- 604-432-6200
- [www.metrovancover.org](http://www.metrovancover.org)  
(search “managing wood smoke”)

Feedback will be accepted until  
presented to Board



Questions or Comments?



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